

**METHOD FOR THE IDENTIFICATION OF MYCOBACTERIUM TUBERCULOSIS, MYCOBACTERIUM TUBERCULOSIS COMPLEX AND MYCOBACTERIUM BOVIS IN A BIOLOGICAL SAMPLE, AND THE USE OF SPECIFIC OLIGONUCLEOTIDES**

<i>Offering Organization:</i>	Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.
<i>Type of Organization:</i>	Public Research Center
<i>Development Stage:</i>	Laboratory
<i>Desired Relationship:</i>	<ul style="list-style-type: none"> <li>– Technological research and development financing (technological partner)</li> <li>– Specialized application tests</li> <li>– Creation of a new company (Joint Venture) for the commercialization of the products outlined herein</li> <li>– Licensing of patents</li> </ul>
<i>Sector:</i>	Biomedical Biotechnology
<i>Area of knowledge:</i>	Medicine
<i>Key words:</i>	<i>Mycobacterium tuberculosis, Mycobacterium bovis, Mycobacterium tuberculosis complex, oligonucleotides, in vitro</i>

**DETAILED DESCRIPTION:**

*Problem to be solved:*

Tuberculosis is a disease that causes high morbidity and remains a major social and health problem in our country. It is estimated that 2 billion people are infected with *Mycobacterium tuberculosis*. The number of mycobacterial infections is increasing in Mexico and throughout the world at large. Many of these cases are related to the AIDS epidemic that causes immunodeficiency, sufferers of which are particularly susceptible to mycobacteria infections.

*Solution:*

The present invention describes and claims an *in vitro* method for the specific identification of *Mycobacterium tuberculosis*, *Mycobacterium bovis* and *Mycobacterium complex*, using a simultaneous method of multiplex PCR and the diagnostic kit it contains and the use of the oligonucleotides described in the following: SEQ. ID. No. 1, SEQ. ID. No. 2, SEQ. ID. No. 3, SEQ. ID. No. 4, SEQ. ID. No. 5, y SEQ. ID. No. 6.

*New and Innovative Aspects:*

Specific identification of *Mycobacterium tuberculosis*, *Mycobacterium tuberculosis complex* and *Mycobacterium bovis* via a method of using oligonucleotides.

**TECHNICAL CHARACTERISTICS:**

The present invention relates to an *in vitro* method for the specific identification of *Mycobacterium tuberculosis*, *Mycobacterium tuberculosis complex*, and *Mycobacterium bovis*. It is comprised of the following steps:

- a) Amplify DNA fragments from a biological sample via PCR with oligonucleotides.
- b) Identify amplified DNA fragments where said oligonucleotides are simultaneously used.

*Main advantages derived from its utilization:*

- The present invention allows for the easy and quick diagnosis of the specific infection.

*Applications:*

- Laboratory

**INTELLECTUAL PROPERTY**

- Patent filed in 2012
- MX/a/2012/007512

**ABOUT THE OFFERING ORGANIZATION**

*Presentation:*

El Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C. (CIATEJ) is a public research center that belongs to the national technology development and innovation network, the National Council for Science and Technology (CONACyT). CIATEJ is focused on the agricultural, food, health, and environmental sectors with an emphasis on the application of innovative biotechnology.

*Contact Information:*

Mtro. Evaristo Urzúa Esteva - [eurzua@ciatej.net.mx](mailto:eurzua@ciatej.net.mx)